

Attorney Docket No. I-6909-1919 US

IN THE CLAIMS:

1-34. (Cancelled)

35. (Currently Amended) An immunogenic protein ~~from~~ of *Dictyocaulus viviparus*, wherein the protein has a molecular weight of 15,000 to 18,000 daltons, and an isoelectric point between 5.3 and 5.9.

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36. (Previously Added) The immunogenic protein according to claim 35, wherein the protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO:1; SEQ ID NO:2; SEQ ID NO:3; SEQ ID NO:4; SEQ ID NO:5; SEQ ID NO:6; and SEQ ID NO:7.

37. (Currently Amended) The immunogenic protein according to claim 35, wherein the protein has a molecular weight of $16,000 \pm 1,500$ daltons and an isoelectric point of 5.6.

38. (Previously added) The immunogenic protein according to claim 35, comprising an amino acid sequence of SEQ ID NO:30, or part thereof ~~having immunogenic properties that produces~~ antibodies that provide protection against *Dictyocaulus viviparus*.

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39. (Previously Added) An isolated nucleic acid molecule which encodes the protein according to claim 35.

40. (Previously Added) The isolated nucleic acid according to claim 39, wherein the nucleic acid sequence is selected from the group consisting of SEQ ID NO:10; SEQ ID NO:11; SEQ ID NO:12; SEQ ID NO:13; and SEQ ID NO:14.

41. (Currently Amended) The isolated nucleic acid according to claim 39, comprising SEQ ID NO:29 or a nucleic acid that hybridizes, under stringent conditions of 6X SSC at 68 °C, to a nucleotide sequence according to SEQ ID NO:29.

42. (Canceled)

43. (Canceled)

44. (Canceled)

45. (Previously Added) A vaccine, comprising:
a effective amount of the protein according to claim 35,
and
a suitable adjuvant or carrier.

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46. (Currently Amended) A method for immunizing cattle against *Dictyocaulus viviparus viviparus*, comprising: administering to a cattle in need thereof a vaccine according to claim 45.

47. (Previously Added) A diagnostic kit, comprising: the protein according to claim 35.

48. (Previously Added) A diagnostic kit, comprising: the polypeptide isolated nucleic acid molecule according to claim 39.

49. (Previously Added) A recombinant vector, comprising: the nucleic acid molecule according to claim 39.

50. (Previously Added) A host cell, comprising: the vector according to claim 49.

51. (New) An immunogenic protein of *Dictyocaulus viviparus*, wherein the protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO:1; SEQ ID NO:2; SEQ ID NO:3; SEQ ID NO:4; SEQ ID NO:5; SEQ ID NO:6; SEQ ID NO:7 and SEQ ID:30.

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52. (New) An isolated nucleic acid molecule which encodes the protein according to claim 51.

53. (NEW) The isolated nucleic acid according to claim 52, wherein the nucleic acid sequence is selected from the group consisting of SEQ ID NO:10; SEQ ID NO:11; SEQ ID NO:12; SEQ ID NO:13; SEQ ID NO:14; and SEQ ID:29.

54. (NEW) A vaccine, comprising:

a effective amount of the protein according to claim 51,
and

a suitable adjuvant or carrier.

55. (NEW) A method for immunizing cattle against *Dictyocaulus viviparus*, comprising:

administering to a cattle in need thereof a vaccine according to claim 54.

56. (NEW) A diagnostic kit, comprising:

the protein according to claim 51.

57. (NEW) A diagnostic kit, comprising:

the isolated nucleic acid molecule according to claim 52.

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58. (New) A recombinant vector, comprising:
the nucleic acid molecule according to claim 52.

59. (NEW) A host cell, comprising:
the vector according to claim 58.